

**RESOLUTION ITU-R 40\***

**WORLDWIDE DATABASES OF TERRAIN HEIGHT  
AND SURFACE FEATURES**

(1997)

The ITU Radiocommunication Assembly,

*Considering*

- a) that there is a requirement for planning purposes for improved worldwide methods of predicting field-strength which take account of terrain height and surface features (including ground cover such as buildings, vegetation, etc.);
- b) that digital maps of terrain height are now becoming widely available with various data formats and resolutions, and that maps with 30 arc second resolution in latitude and longitude are available for most of the world;
- c) that propagation predictions may be improved by the inclusion of more detailed information on terrain heights and surface features;
- d) that the availability of digital maps of terrain height and surface features would be of considerable benefit to developing countries in the planning of their existing and newly introduced services;
- e) that Radiocommunication Study Group 3 has an active work programme concerning the development of improved prediction methods,

*resolves*

- 1** that, initially, a terrain database with a 30 arc second horizontal resolution in latitude and longitude is suitable for worldwide methods of propagation prediction in the frequency range from 30 MHz to 3 GHz;
- 2** that administrations should review the terrain data available in this format, and should provide additional data so as to complete the worldwide extent of the database;
- 3** that administrations should be encouraged to make these terrain databases freely available for ITU purposes;
- 4** that administrations should encourage organizations involved in the production of terrain maps to produce databases of terrain height and surface features with a resolution equal to, or better than, 30 arc seconds for areas for which such data do not exist.

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\* This Resolution should be brought to the attention of Radiocommunication Study Group 1 for consideration of the use of a terrain data base for national spectrum management purposes. This Resolution should also be brought to the attention of the Telecommunication Development Sector.